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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/553,428

11/13/2006

Johannes Alfred Beele

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EXAMINER

HOLLOWAY, JASON R

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/553,428	<b>Applicant(s)</b> BEELE, JOHANNES ALFRED	
	<b>Examiner</b> JASON HOLLOWAY	<b>Art Unit</b> 3633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-16 is/are pending in the application.
- 4a) Of the above claim(s) 6, 14 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-5, 7-13 and 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>12 April 2010</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

The previous 35 USC 112 rejections are withdrawn in light of applicant's amendments.

### ***Claim Objections***

1. Claims 1 and 5 are objected to because of the following informalities:

In claim 1 line 2 and claim 5 line 8 it appears "foam" should be --form--.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallace (5,719,199).

**Regarding claim 1**, Wallace teaches a fire-resistant material comprising an elastomeric foam of cross-linked ethylene vinyl acetate with a substantially closed cell structure (the abstract line 1 teaches a flexible closed cell polymeric foam; column 2 lines 56-66 and column 12 lines 17-23 teaches ethylene vinyl acetate foam; although Wallace does not explicitly disclose the ethylene vinyl acetate is cross-linked, the examiner would like to point out that common forms of ethylene vinyl acetate comprise this same property and it would have been obvious to one of ordinary skill in the art that

Art Unit: 3633

the ethylene vinyl acetate disclosed in Wallace comprises the same materials claimed by the applicant) in which form at least one crust-forming fire-retardant material and a pH neutralized graphite material are incorporated (column 3 lines 12-15 teaches expandable graphite material is incorporated in the design by the method disclosed in U.S. Patent No. 3,574,644. In column 2 lines 55-64, the '644 patent to Olstowski teaches the graphite material is treated with basic materials which the examiner contends neutralizes the graphite), wherein the crust-forming fire-retardant material has been selected from poly ammonium phosphate and melamine phosphate (column 1 lines 21-30 teaches a phosphorous and melamine containing compound can be added to the foam as an additional fire retardant ingredient, the examiner contends that these ingredients will aid in the forming of the crust when subjected to fire).

**Regarding claim 3**, Wallace teaches the graphite material expands at a temperature higher than 200°C (column 3 lines 58-65 teaches the graphite is activated between 115 and 250 degrees Celsius).

**Regarding claim 4**, Wallace teaches the material in the form of a plate-shaped or beam-shaped element (Wallace teaches his invention can be used in airplane seat cushions, thus they are in "plate" form).

4. Claims 5, 7-10, 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallace (5,719,199) in view of Cordts et al (US 2004/0093814).

**Regarding claim 5**, Wallace teaches the claimed material properties of the invention as addressed above in the rejection to claim 1, however, Wallace fails to

Art Unit: 3633

explicitly disclose the material in use with the transporting devices in wall openings as claimed by the applicant.

Cordts teaches a system for sealing off, at least during a fire taking place adjacent a wall (walls 8 of figure 3 of Cordts), in at least one of a virtually entirely flame-tight manner and smoke-tight manner (see para [0020] of Cordts for flame-tight and smoke-tight properties),

an opening extending through this wall (opening 6 of figure 3 of Cordts), through which a transporting device comprising at least one of a cable, duct and pipe has been fed (a duct having cables 12a passing through wall 8 is illustrated in figure 3 of Cordts), the system being provided with elements manufactured from a fire-resistant material which expands under the influence of temperature increase (via intumescent materials of Cordts described in [0020]).

Therefore, from the teaching of Cordts, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the firestopping material of Wallace as the firestopping material used in Cordts since the firestopping material of Wallace will not drip when heating like typical firestopping materials thus they will not drip onto anyone standing below the material (see column 12 lines 12-15), which could potentially cause serious injury.

**Regarding claim 7**, the combination of Wallace and Cordts teaches the system is designed such that the elements can be fixed in a self-clamping manner in the opening or in a casing thereof through mutual contact, contact with an inner wall of the opening or contact with the transporting device (as described in para [0029] of Cordts,

Art Unit: 3633

the intumescent material is held in place by contacting the cables 12a and by contacting the walls, thus the examiner construes this meets the definition of the "self clamping" limitation).

**Regarding claim 8**, the combination of Wallace and Cordts teaches the system is capable of being substantially fixed within a volume which is bounded by a first outer surface of the wall and a second outer surface of the wall located opposite the first outer surface (as illustrated in figure 3 of Cordts, the intumescent material 30 is disposed in a volume between the outer and inner portions of the walls 8).

**Regarding claims 9 and 16**, the combination of Wallace and Cordts teaches after the system has been fixed in the opening (the examiner construes the opening is the same thing as a feed through of claim 16), parts of the opening which are free from the transporting device are sealed off by the system (Cordts teaches the entire system is sealed off in para [0030 and 0038] and the sealed system is illustrated in figure 2).

**Regarding claim 10**, the combination of Wallace and Cordts and teaches the system is designed such that after fixation in the opening, the system is ready for use (it would be obvious to one of ordinary skill in the art that once the system is put in place, the system is ready for use, the examiner construes once the system of Wallace and Cordts is in place, it is ready to be used).

**Regarding claim 13**, the combination of Wallace and Cordts teaches at least one of the elements is of plate-shaped design (as illustrated in figure 3 of Cordts, the material 30 is plate shaped).

Art Unit: 3633

5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wallace (5,719,199) in view of Cordts et al (US 2004/0093814) and further in view of Fay (6,484,463).

**Regarding claim 11**, the combination of Wallace and Cordts teaches at least one of the elements is plate shaped (via plate shaped intumescent material 30 of figure 3 of Cordts), however, the combination of Wallace and Cordts fails to explicitly disclose the plate is provided with a line of weakening, the at least one element being detachable by breaking along the line of weakening in the plate-shaped material.

Fay teaches fibrous insulation panels which are plate shaped and in which lines of weakness (cuts 34, 36 and 38 of figure 2 of Fay are weakened lines) and the at least one element being detachable by breaking along the line of weakening in the plate-shaped material (as described in the abstract).

Therefore, from the teaching of Fay, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the plate members of the combination of Wallace and Cordts to include equally spaced cuts like those in the teaching of Fay in order to enable the installer to easily change the size of the intumescent plate depending on the size of the spacing between the walls needed to be filled.

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wallace (5,719,199) in view of Cordts et al (US 2004/0093814) and further in view of Beele (5,344,106).

**Regarding claim 12**, the combination of Wallace and Cordts fails to explicitly disclose at least one of the elements is of tube-shaped design.

Beele teaches a fire resisting cable system in which tube shaped fire resistant intumescent members 12 having thermally expanding layers 14 and 15 are disposed.

Therefore, from the teaching of Beele, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the plate-shaped intumescent layers of the combination of Wallace and Cordts to include the teaching of adding tube shaped intumescent layers from the teaching of Beele in order to provide additional fire stopping abilities in between the cables thus further protecting the building from fire damage.

### ***Response to Arguments***

Applicant's arguments with respect to claim amended claims 1 and 5 have been considered but are moot in view of the new grounds of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the



Art Unit: 3633

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON HOLLOWAY whose telephone number is (571) 270-5786. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Dunn can be reached on 571-272-6670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner  
Art Unit 3633

JH

Application/Control Number: 10/553,428  
Art Unit: 3633

Page 9

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Primary Examiner, Art Unit 3633